**Or, the Long and the Short of it all**



**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. **Background**

* Louis and Boris are best friends.



* Louis is a Littlesmallian; he is 12 cm tall.
* Boris is a Bigmanian; he is 600 cm tall
* Louis wants to get taller and Boris wants to get smaller.

1. **Doctor’s orders**

* Louis is taking Human Growth Hormones.
* He will be growing 5 cm per year.
* Medication is prescribed beginning January 1, 2011.

1. **Heath-food Nut**

* Boris is tired of bumping his head everywhere he goes.
* He looks into organic reducing pills and his height is reducing by 44 cm a year.
* He started taking the medication on Jan. 1, 2011.

1. **Your questions**
   1. How many years will it take before they are the same height?
   2. How tall will they be when they are the same size?
   3. When, theoretically, would Boris disappear?
   4. From the pictures above, how many times bigger than Louis is Boris? At what year of their treatment might this be?
2. **What you need to hand up:**

* 1st paragraph--write out the scenario as it was given to you.
* 2nd paragraph--write out the process, or processes, you used to solve the problem.
* Show any table, chart, graph, picture, etc., that helped you solve the problem.
* 3rd paragraph--state the answers to the questions.